

# HVBD8 SERIES

## High Voltage Battery Disconnect

**800A CONTINUOUS DUTY**

**1500VDC SYSTEM VOLTAGE**



### APPLICATIONS



### FEATURES

#### The Next Level in Battery Disconnect Technology

- Robust Metal-Ceramic Hermetic Seal
- Industry Leading Dielectric Withstand Voltage
- High Temperature Performance
- *Ultra-Low* Contact Resistance over Life
- Ready for Harsh Environments
- Designed for OSHA compliant Lockout/Tagout (LOTO)
- Optional Integrated Auxiliary Contacts
- *Patent Pending*
- CE compliant
- Designed and Assembled in the USA

### PERFORMANCE

TABLE 1. SPECIFICATIONS	
CHARACTERISTIC	MEASURE
Contact Arrangement	Form X, SPST
Operating Voltage <sup>1</sup>	Up to 1500VDC ( <b>No Switching Under Load</b> )
Dielectric Withstand Voltage	5,375VDC, 1 minute
Continuous Current <sup>2</sup>	800A continuous ( <b>400mm<sup>2</sup> Bus Bar</b> )
Overload Current <sup>2</sup>	See graphs on next page
Make and Break <sup>1</sup> (400A @ 24VDC)	5,000 cycles
Contact Resistance (Measured at 200A)	Typ:0.06mΩ, Max: 0.120 mΩ
Min Insulation Resistance	100MΩ
Shock, 1/2 Sine, 11ms	25G
Vibration, Sinusoidal (10-500Hz Peak)	4G
Vibration, Sinusoidal (500Hz-2000Hz Peak)	20G
Operating Temperature <sup>2</sup>	-55°C to 85°C
Ingress Protection (Sealed Contacts)	Exceeds IP69, (Hermetically Sealed)
Ingress Protection (Housing Feedthrough) <sup>3</sup>	IP67
Weight	425g
Case Material	PA GF
Switch Lever Material	PA GF
Mounting	100mm   C:C, 2X M8
Mounting Position	Any
Auxiliary Contacts	SPDT, 3A Continuous Duty

<sup>1</sup> The HVBD is designed to isolate at voltages up to 1500VDC. The HVBD is not intended for make/break switching above 100V.

<sup>2</sup> 170°C max terminal temperature.

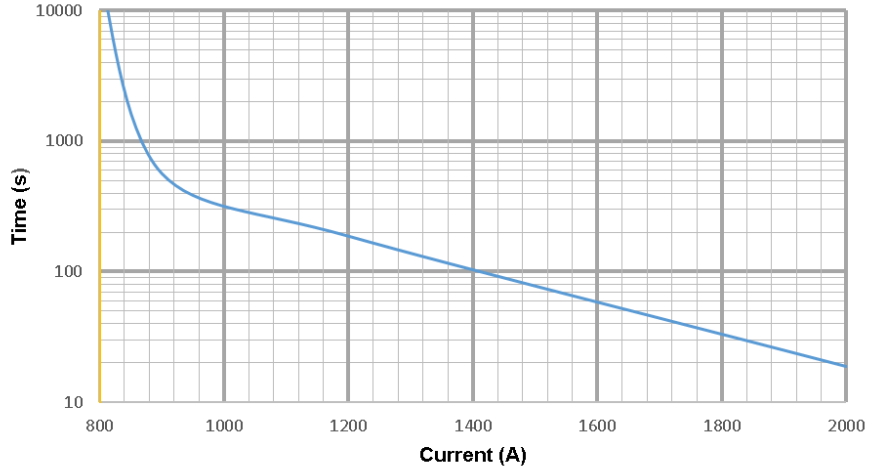
<sup>3</sup> Gasket and or RTV required for feedthrough applications where IP67 is required at the housing flange mounting feature.

**PERFORMANCE** (cont.)

**Application Notes**

- 170°C Max Terminal Temperature
- 400mm<sup>2</sup> Bus Bar
- Graphs provided for design reference; user to verify system temperatures

**HVBD8 Momentary Current Carry**  
(400mm<sup>2</sup> Bus Bar) / 85°C



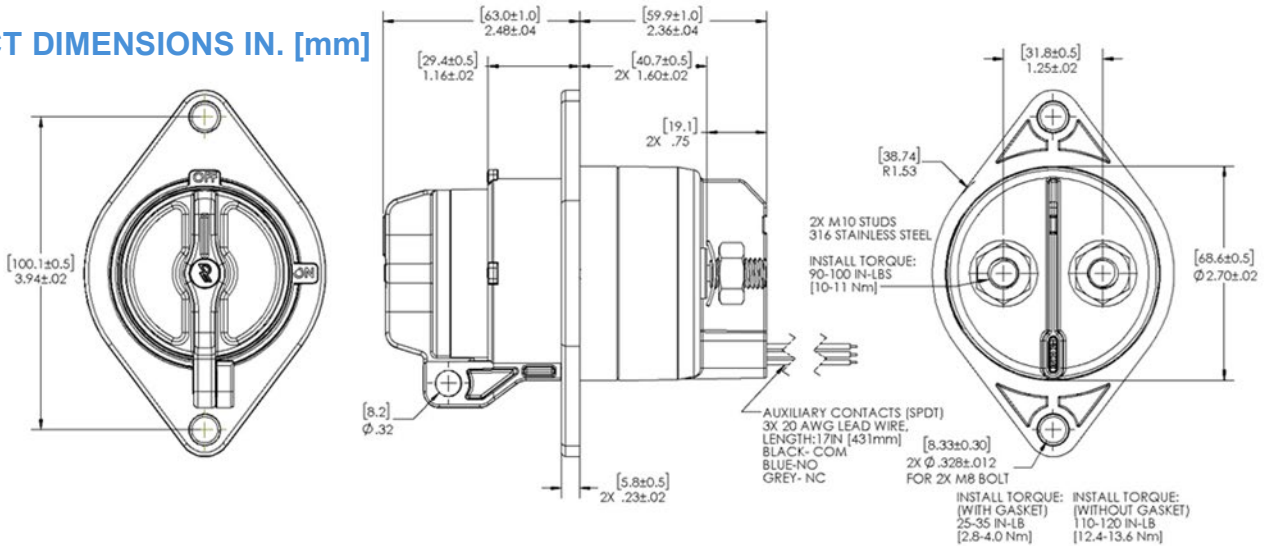
**OPTIONS**

TABLE 2. PRODUCT NOMENCLATURE				
	CURRENT RATING	MOUNTING	AUXILIARY CONTACTS	HANDLE COLOR
HVBD	<b>8</b> 800 Amp	<b>A</b> 100 mm C:C	<b>A</b> Included <b>X</b> None	<b>R</b> Red <b>B</b> Black <b>N</b> Orange

**Optional SPDT auxiliary switch details**

- Main contacts close before auxiliary contacts when switching from OFF to ON
- Auxiliary contacts open before main contacts when switching from ON to OFF
- IP67 sealed
- Auxiliary contacts rated to (3A @ 12VDC 100k cycles)

**PRODUCT DIMENSIONS IN. [mm]**



**AVAILABLE ACCESSORIES**

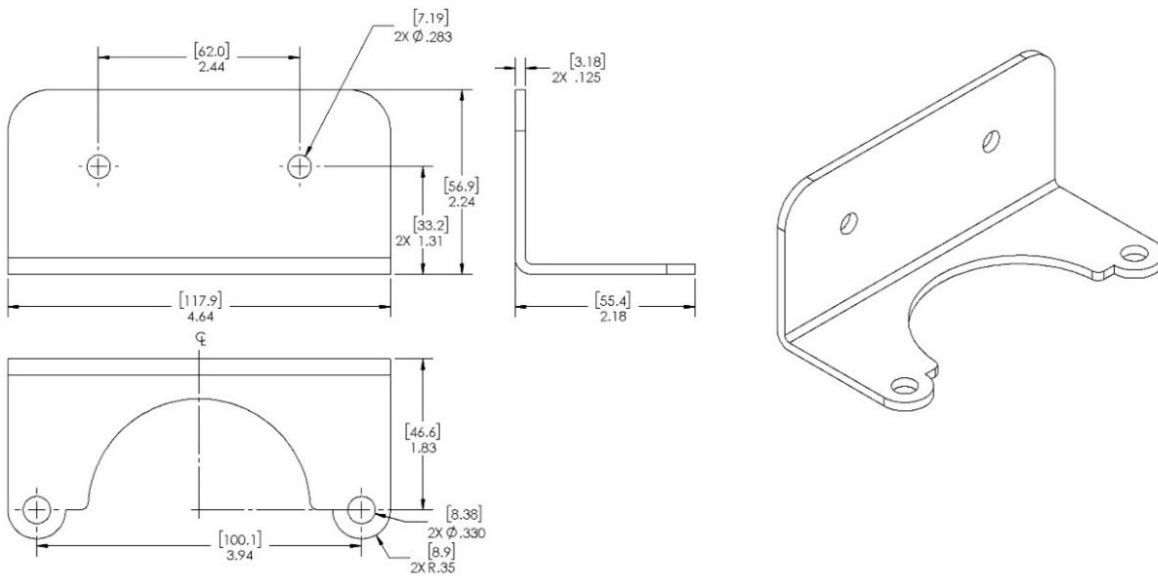
**LOTO Padlock**

- Safe operation requires the use of an OSHA certified lockout/tagout (LOTO) padlock to ensure the switch remains in the off position
- Lockout Tagout Padlock Requirements:
  - Shackle DIA: 9/32"
  - Vertical Clearance: 3/4"
  - Horizontal Clearance: 5/8"
- Contact Rincon Power for OSHA certified lockout tagout padlock



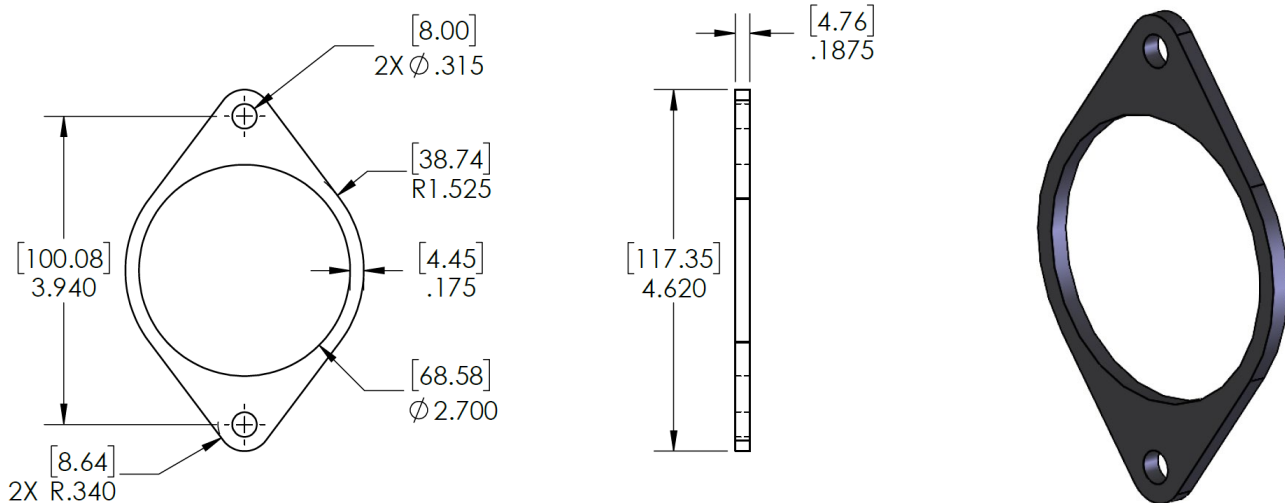
**RP2099 Mounting Bracket**

- Allows for 90-degree mounting



## AVAILABLE ACCESSORIES (cont.)

### RP2127 Mounting Gasket



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